# The FY 2001 Joint Program Announcement on Climate Variability and Human Health

National Oceanic And Atmospheric Administration (NOAA) In Collaboration With Environmental Protection Agency (EPA)
National Aeronautics and Space Administration (NASA)
National Science Foundation (NSF)
Electric Power Research Institute (EPRI)

**AGENCY**: Office of Global Programs, Office of Oceanic and Atmospheric Research, National Oceanic and Atmospheric Administration, Commerce.

SUMMARY: With the intent of stimulating integrated multidisciplinary studies and enhancing institutional collaboration, National Oceanic Atmospheric Administration (NOAA), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), and the Electric Power Research Institute (EPRI), announce our interest in receiving research proposals to improve our understanding of the human health consequences related to climate variability and enhance the integration of useful climate information into public health policy and decision-making. This joint announcement is intended to support the formation of multidisciplinary teams working in close collaboration on integrated projects to illuminate pathways by which climate may affect human health, and which explore the potential for applying climate forecast information in the public health arena. Climate refers to climate variability across time scales. Understanding how short term climate variability affects human health may improve our knowledge of potential consequences of, and adaptation to, longer term changes in the climate system.

#### **Relevance of This Joint Announcement**

In 1995, the White House along with the National Academy of Sciences elevated the climate and health issue through their jointly sponsored Conference on Human Health and Global Climate Change. Since then, several multi-agency sponsored workshops such as the American Academy of Microbiology Colloquium on Climate Variability and Human Health: An Interdisciplinary Perspective, and the workshop on Climate Change and Vector-borne and other Infectious Disease: A Research Agenda, have begun to define research needs in this emerging discipline. The recently issues NRC Pathways report recognizes that climate may have important impacts on human health but that further study is necessary, and that such studies must also address issues of social vulnerability and adaptability. The NRC also is conducting a study on Climate, Ecology, Infectious Disease and Health.

Over the past several years as interest in this new field has grown, research and analysis have demonstrated a connection between climate and health in some cases. Yet it is well recognized that more research is required. This, coupled with an evolving capacity to understand and predict natural changes in the climate system, and a desire to provide

climate forecast information for social benefit, particularly in the public health sector, has driven demand for improved understanding of the relationship between climate variability and human health.

Both the scientific research results and recommendations stemming from various meetings highlight the complexity of the research questions and the need for a coordinated multi-agency and interdisciplinary approach. The very nature of the research required cuts across disciplinary boundaries, and spans a range of agency missions and mandates and private sector interests. The NOAA Office of Global Programs is interested in the production and application of predictive climate information; EPA is concerned with the impacts of climate change and variability on human health; and NASA's interests include remote sensing observations, research, data, information and technologies for public health. Moreover, NSF focuses on broadly based fundamental research to improve understanding of the Earth system, and EPRI addresses key research gaps in climate change and human health. This announcement is offered as an experimental mechanism to fill critical gaps in climate variability and human health research and to coordinate funding of overlapping agency and institutional interests in such research. Other private sector organizations interested in jointly funding research through this announcement process should contact the NOAA Program Officer Juli Trtani (301) 427-2089, ext. 134, or internet: juli.trtani@noaa.gov. Research projects will be funded for a one, two or three year period. Funding beyond the first year is contingent upon availability of funds.

# **Program Objectives**

The overarching goal of this announcement is to develop and demonstrate the feasibility of new approaches or field studies that investigate or validate well-formed hypotheses or models of climate variability and health interactions. This announcement is offered as part of an interagency effort to build an integrated climate and health community. Proposed research submitted under this announcement is encouraged to build on existing research activities, programs, research sites and facilities, or data sets.

## **Requirements and General Guidance**

Research teams should include, at a minimum, one investigator each from the public health or medical response, ecology, and climate communities working in close collaboration on an integrated project. Research proposals submitted under this announcement are strongly encouraged to include components addressing either the adaptation or vulnerability of human and public health systems to climate variability, or an economic analysis of using predictive climate information, or both. (See Criteria for Evaluation b). The funding partners will look favorably on research activities that involve end-users from the public health arena (i.e., local public health officials, regional or international health organizations, other public health or disaster management agencies and institutions) and which address the means by which their research results can be used by public health policy and decision-makers. (See Criteria d). Investigators are encouraged to demonstrate that they will disseminate research results through formal

presentation during at least one professional meeting and publication in a peer-reviewed journal. (See Criteria b).

Investigators should also plan to participate in an annual meeting of researchers funded under this announcement. This meeting will be organized by the funding partners and is intended to facilitate midpoint discussions of research and methodology as well as presentations of final research results. The participation of other team members, particularly new researchers at the graduate and postdoctoral level, is highly encouraged. An interim progress report will be required.

**DATES**: Unless otherwise noted, strict deadlines by which NOAA OGP must receive proposals for submission to the FY 2001 process are: Pre-proposals must be received by OGP no later than January 31, 2001, and full proposals must be received no later than April 6, 2001.; Applicants who have not received a response to their pre-proposal within four weeks should contact the program office: Juli Trtanj (301) 427-2089, ext. 134 or internet: juli.trtanj@noaa.gov. The time from target date to grant award varies. We anticipate that review of full proposals will occur in May or June 2001, for most approved projects.

September 1, 2001, may be used as the earliest proposed start date on the proposal, unless otherwise directed by the appropriate Program Officer. Applicants should be notified of their status within six months of full proposal submission. All proposals must be submitted in accordance with the requirements listed below. Failure to heed the requirements may result in proposals being returned without review.

**ADDRESSES**: All submissions should be directed to:

Office of Global Programs (OGP); National Oceanic and Atmospheric Administration 1100 Wayne Avenue, Suite 1225 Silver Spring, MD 20910-5603.

**FOR FURTHER INFORMATION CONTACT**: Irma duPree at the above address or phone (301) 427-2089, ext. 107, fax: (301) 427-2072, Internet: duPree@ogp.noaa.gov.

#### **SUPPLEMENTARY INFORMATION:**

## 1. Funding Availability

NOAA, EPA, NASA, NSF and EPRI believe that the research on the relationship between climate variability and human health will benefit significantly from a strong partnership with outside investigators. Current plans assume that over 50% of the total resources provided through this announcement will support extramural efforts, particularly those involving the broad academic community. Funding may be provided by NOAA, EPA, NASA, NSF or EPRI.

This Program Announcement is for projects to be conducted up to a three-year period by investigators both inside and outside of NOAA, EPA, NASA, NSF and EPRI. The funding instrument for extramural awards will be a grant unless it is anticipated that any of the funding entities will be substantially involved in the implementation of the project, in which case the funding instrument should be a cooperative agreement. Examples of substantial involvement may include but are not limited to proposals for collaboration between a funding entity or funding entity scientist, and a recipient scientist or technician and/or contemplation by NOAA, EPA, NASA or NSF of detailing Federal personnel to work on proposed projects. NOAA, EPA, NASA and NSF will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Matching share is not required by this program.

## 2. Eligibility

Participation in this competition is open to all institutions eligible to receive support for NOAA, EPA, NASA, NSF and EPRI. For awards to be issued by NOAA, eligible applicants are institutions of higher education, hospitals, other nonprofits, commercial organizations, foreign governments, organizations under the jurisdiction of foreign governments, international organizations, state, local and Indian tribal governments and Federal agencies. Applications from non-Federal and Federal applicants will be competed against each other. Proposals selected for funding from non-Federal applicants will be funded through a project grant or cooperative agreement under the terms of this notice. Proposals selected for funding from NOAA employees shall be effected by an intragency fund transfer. Proposals selected for funding from a non-NOAA Federal Agency will be funded through an interagency transfer. Before non-NOAA Federal applicants may be funded, they must demonstrate that they have legal authority to receive funds from another federal agency in excess of their appropriation. Because this announcement is not proposing to procure goods or services from applicants, the Economy Act (31 USC 1535) is not an appropriate legal basis.

## 3. **Program Authority**

NOAA Authority: U.S.C. 2931 et seq.; (CFDA No. 11.431)--CLIMATE AND ATMOSPHERIC RESEARCH.

EPA Authority: 42 U.S.C. 7403(a); 42 U.S.C. 7403(b); 42 U.S.C.

**7403(g)**; **15 U.S.C. 2907(a)**; (CFDA No. 66.500)--OFFICE OF RESEARCH AND DEVELOPMENT.

NSF Authority: 42 U.S.C. 1861-75; (CFDA No. 47.050)--GEOSCIENCES.

NASA Authority: 15 U.S.C. 2932(a); 15 U.S.C. 2932(b); 15 U.S.C.

2932(e2); 15 U.S.C. 2936; (CFDA No. 43-999).

#### **Guidelines for Submission**

#### 1. Pre-proposals

- (a) Pre-proposals should be no longer than eight pages in length (no attachments please) and include the names and institutions of all investigators, a statement of the problem, description of data and methodology including names of data sets and types of models or analysis, a general budget for the project, a description of intended use of results for public health policy and decision making, and a one to two page biographical sketch for each investigator.
- (b) The Program Officers will evaluate the pre-proposals.
- (c) Submission of pre-proposals is not a requirement, but it is in the best interest of the applicants and their institutions.
- (d) Facsimile and email submissions are acceptable for pre-proposals only.
- (e) Projects deemed unsuitable during pre-proposal review will not be encouraged to submit full proposals.
- (f) Investigators who are not encouraged to submit full proposals will not be precluded from submitting full proposals.

#### 2. Criteria for Evaluation

Below are the criteria for evaluation which will be used for making award decisions. Pre-proposals will be evaluated on likely ability to meet these criteria.

- (a) **Scientific Merit** 60% (to include: Methodology, proof of data quality and availability, experience of team and team members, and relevant peer-reviewed publications)
- (b) Responsiveness to announcement-20%
- (c) Explicit multidisciplinary participation and collaboration--10%
- (d) Potential for use by climate, ecology and health community or public/environmental health community--10%

#### 3. Selection Procedures and Review Process

The Program Officers will not be voting members of an independent peer panel. Each Program Officer will individually rank the proposals considering the recommendations and evaluations of the independent peer panel and the program policy factors listed below. The Federal Agency Program Officers will then make the funding selections taking into account these rankings, the panel review and evaluations, and program policy factors listed below. Proposals are usually awarded in the numerical order they are ranked based on the independent peer mail review or the independent peer panel review. However, the Program Officers may consider the following program policy factors: (a) Whether proposals do not substantially duplicate other projects that are currently funded by NOAA, other Federal agencies or funding sources; (b) whether proposals do not substantially duplicate other proposals submitted in response to this announcement; (c) whether proposals funded maximize use of available funds; and (d) whether proposal cost fall within remaining funds available. As a result of this review, the Program Officers may decide to select an award out of order. The Program Officers will also determine the total duration and amount of funding for each selected proposal. Both agency and non-agency experts in the field may be used in this process.

Unsatisfactory performance by a recipient under prior Federal awards may result in an application not being considered for funding. Federal agency employees are subject to statutes pertaining to non-disclosure and confidentiality requirements protecting proprietary information that may be contained in applications submitted for potential funding. Non-Federal evaluators have agreed in writing to similar non-disclosure and confidentiality provisions. Please note, however, that should EPRI or another participating private organization which jointly funds research under this notice select an application for funding, none of the participating Federal agencies is responsible for any unauthorized disclosure of information that may occur on any dispute that may arise.

#### 4. Proposal Submission

The following forms are required in each application, with original signatures on each federal form. Failure to comply with these provisions will result in proposals being returned without review.

(a) **Full Proposals**: (1) Proposals submitted to the NOAA Climate and Global Change Program must include the original and two unbound copies of the proposal. (2) Investigators are required to submit 3 copies of the proposal; however, the normal review process requires 20 copies. Investigators are encouraged to submit sufficient proposal copies for the full review process if they wish all reviewers to receive color, unusually sized (not 8.5 x 11"), or otherwise unusual materials submitted as part of the proposal. Only three copies of the Federally required forms are needed. (3) Proposals must be limited to 40 pages (numbered), including statement of work, budget, investigators' vitae, and all appendices. Appended information may not be used to

circumvent the page length limit. Federally mandated forms are not included within the page count. (4) Proposals should be sent to the NOAA Office of Global Programs at the above address. (5) Facsimile transmissions and electronic mail submission of full proposals will not be accepted.

- (b) **Required Elements**: All proposals must include the following elements:
  - (1.) **Signed title page**: The title page must be signed by the Principal Investigator (PI) and the institutional representative. If more than one investigator is listed on the title page, pleases identify the lead investigator. The PI and institutional representative should be identified by full name, title, organization, telephone number and address. The total amount of Federal funds being requested should be listed for each budget period.
  - (2.) **Abstract**: An abstract must be included and should contain an introduction of the problem, rationale and a brief summary of work to be completed. The abstract should appear on a separate page, headed with the proposal title, institution(s), investigator(s), total proposed cost and budget period.
  - (3.) **Results from prior research**: The results of related research activities should be described, including their relation to the currently proposed work. Reference to each prior research award should include the title, agency or institution, award number, PIs, period of award and total award. The section should be a brief summary and should not exceed two pages total.
  - (4.) **Statement of work**: The proposed project must be completely described, including identification of the problem, scientific objectives, proposed methodology, and relevance to the announcement. Benefits of the proposed project to the general public and the scientific community should also be discussed. A summary of proposed work must be included clearly indicting that the proposed work is achievable. The statement of work, including references but excluding figures and other visual materials, must not exceed 15 pages of text.

Investigators wishing to submit group proposals that exceed the 15-page limit should discuss this possibility with the appropriate Program Officer prior to submission. In general, proposals from 3 or more investigators may include a statement of work containing up to 15 pages of overall project description plus up to 5 additional pages for individual project descriptions.

- (5.) (5.) **Budget Justification**: A brief description of the expenses listed on the budget and how they address the proposed work. Itemized justification must include salaries, equipment, publications, supplies, tuition, travel, etc.
- (6.) (6.) **Budget**: The proposal must include total and annual budgets corresponding with the descriptions provided in the statement of work. on-Federal Applicants must submit a Standard Form 424 (4-92) "Application for Federal Assistance", including a detailed budget using the Standard Form 424a (4-92), "Budget Information--Non-Construction Programs". The form is included in the standard NOAA application kit. Additional text to justify expenses should be included as necessary. Federal researchers should contact Irma duPree at (301) 427-2089 ext. 107, for guidance regarding the types of forms required for submission. Additionally, Federal researchers should provide, with their application, the appropriate statutory authority which allows their agency to receive funds from another Federal agency to complete the work outlined in their proposal.
- (7.) **Vitae**: Abbreviated curriculum vitae are sought with each proposal. Reference lists should be limited to 10-15 of the most recent and relevant publications with up to five other relevant papers.
- (8.) (8) **Current and pending support**: For each investigator, submit a list that includes project title, supporting agency with grant number. Investigator months, dollar value and duration. Requested values should be listed for pending support.
- (9.) (9) **List of suggested reviewers**: The cover letter may include a list of individuals qualified and suggested to review the proposal. It also may include a list of individuals that applicants would prefer to not review the proposals. Such lists may be considered at the discretion of the Program Offices.

## d) Other requirements:

Applicants may obtain a Standard NOAA application kit from the Program homepage at http://www.ogp.noaa.gov/, or from Irma duPree at the Program Office (301) 427-2089 X107.

**Primary applicant certification**--All primary applicants must submit a completed Form CD-511, ``Certification Regarding Debarment, Suspension and Other Responsibility Matters; Drug-Free Workplace

Requirements and Lobbying" Applicants are also hereby notified of the following:

- 1. Nonprocurement Debarment and Suspension Prospective participants (as defined at 26 CFR part 26, section 105) are subject to 15 CFR part 26, "Nonprocurement Debarment and Suspension" and the related section of the certification form prescribed above applies.
- 2. **Drug Free workplace**--Grantees (as defined at 15 CFR part 26, section 605) are subject to 15 CFR part 26, subpart F, Government-wide Requirements for Drug-Free Workplace (Grants)`` and the related section of the certification form prescribed above applies;
- 3. **Anti-Lobbying**--Persons (as defined at 15 CFR part 28, section 105) are subject to the lobbying provisions of 31 U.S.C. 1352, "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions", and the lobbying section of the certification form prescribed above applies to applications/bids for grants, cooperative agreements, and contracts for more than \$100,000, and loans and loan guarantees for more than \$150,000, or the single family maximum mortgage limit for affected programs, whichever is greater; and (4) Anti-Lobbying disclosures--Any applicant that has paid or will pay for lobbying using any funds must submit an SF-LLL. "Disclosure of Lobbying Activities," as required under 15 CFR part 28, appendix B.

#### 4. (d) Lower Tier Certifications:

- (1.) Recipients must require applicants/bidders for subgrants, contracts, subcontracts, or lower tier covered transactions at any tier under the award to submit, if applicable, a completed Form CD-512, ``Certifications Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions and Lobbying" and disclosure form SF-LLL, ``Disclosure of Lobbying Activities" Form CD-512 is intended for the use of recipients and should not be transmitted to DOC. SF-LLL submitted by any tier recipient or subrecipient should be submitted to DOC in accordance with the instructions contained in the award document.
- (2.) Recipients and subrecipients are subject to all applicable Federal laws and Federal and Department of Commerce

policies, regulations, and procedures applicable to Federal Financial assistance awards.

- (3.) **Pre-award Activities**--If applicants incur any costs prior to an award being made, they do so solely at their own risk of not being reimbursed by the Government.

  Notwithstanding any verbal assurance that may have been received, there is no obligation to the applicant on the part of Department of Commerce to cover pre-award costs.
- (4.) This program is subject to the requirements of OMB Circular No. A-110, ``Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations", and 15 CFR part 24, ``Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments", as applicable. Applications under this program are not subject to Executive Order 12372, ``Intergovernmental Review of Federal Programs."
- (5.) All non-profit and for-profit applicants are subject to a name check review process. Name checks are intended to reveal if any key individuals associated with the applicant have been convicted of, or are presently facing criminal charges such as fraud, theft, perjury, or other matters which significantly reflect on the applicant's management, honesty, or financial integrity.
- (6.) A false statement on an application is grounds for denial or termination of funds and grounds for possible punishment by a fine or imprisonment as provided in 18 U.S.C. 1001.
- (7.) No award of Federal funds shall be made to an applicant who has an outstanding delinquent Federal debt until either: (i) The delinquent account is paid in full, (ii) A negotiated repayment schedule is established and at least one payment is received, or (iii) Other arrangements satisfactory to the Department of Commerce are made.
- (8.) **Buy American-Made Equipment or Products**-Applicants are encouraged that any equipment or products authorized to be purchased with funding provided under this program must be American-made to the maximum extent feasible.

- (9.) The total dollar amount of the indirect costs proposed in an application under this program must not exceed the indirect cost rate negotiated and approved by a cognizant Federal agency prior to the proposed effective date of the award or 100 percent of the total proposed direct cost dollar amount in the application, whichever is less.
- e) (e) If an application is selected for funding, the Department of Commerce has no obligation to provide any additional future funding in connection with the award. Renewal of an award to increase funding or extend the period of performance is at the total discretion of the Department of Commerce.
- f) (f) In accordance with Federal statutes and regulations, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, denied benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the NOAA Climate and Global Change program. The NOAA Climate and Global Change Program does not have direct TDD (Telephonic Device for the Deaf) capabilities, but can be reached through the State of Maryland supplied TDD contact number, 800-735-2258, between the hours of 8:00 am-4:30 p.m.

Classification: This notice contains collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, and SF--LLL have been approved by OMB under the respective control numbers 0348-0043, 0348-0044, and 0348-0046. Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the Paper Reduction Act, unless that collection displays a currently valid OMB control number. This notice has been determined to be not significant for purposes of Executive Order 12866.